IN THE UNITED STATES DISTRICT COURT FOR THE DISTRICT OF NEW MEXICO

STATE OF NEW MEXICO, ex rel)	
DARR ANGELL, and)		
DARR ANGELL, Individually,)	
)	
Plaintiffs,)	
v.)	CV No. O3-318 JH/RLF
)	
SHELL OIL COMPANY,)	
POLARIS PRODUCTION CORPORATION, and)	
UNITED OPERATING, LLC,)	
)	
Defendants.)	

PLAINTIFF'S PROPOSED FINDINGS OF FACT AND CONCLUSIONS OF LAW

COMES NOW Darr Angell, Individually and as representative of the State of New Mexico (hereinafter referred to as "Angell") by and through his attorneys Heidel, Samberson, Newell, Cox & McMahon, and for his Proposed Findings of Fact and Conclusions of Law, states:

- 1. Angell is a rancher in Lea County, New Mexico, who owns a ranch located approximately 10 to 12 miles northeast of Lovington, New Mexico. (Tr. Vol. I, page 10 lines 21-23).
- 2. Part of this ranch includes an area where part of the Denton Oil Field is located.

 (Tr. Vol I., page 40 Line 24 through page 41 line 23).
- 3. The Ogalalla Aquifer overlays the Permian Basin where the Denton Field is located. (Tr. Vol. II, page 226 lines 2 through 10).
- 4. The Denton Oil Field includes several leases, one of the leases is the Denton Oil Field is the Priest lease. (Tr. Vol. I, page 90 lines 6-15).

- 5. The first well on the Priest lease was developed in the late 1940's or early 50's. (Tr. Vol. I, page 229 line 20 through page 231 line 11).
- 6. Shell Oil Company (hereinafter referred to as "Shell") was the original operator of the Priest lease and operated the lease for approximately 22 or 23 years until it sold and was succeeded in operations by Polaris Production Company in 1973 (hereinafter referred to as "Polaris"). (Tr. Vol. I page 231 line 12 through page 232 line 10).
- 7. Polaris operated the Priest lease for approximately twenty-seven years from 1973 to 2000. (Tr. Vol. I, page 231 lines 12 through 16).
- 8. When Polaris took over operations from Shell the equipment was in "real good shape." (Tr. Vol I, page 232 lines 3 through 16).
- 9. When Polaris took over operations, the Kobe triplex pump and its sump or pit was not present on the east side of the Priest lease battery. It was Polaris which installed the Kobe triplex pump and sump. (Tr. Vol I, page 232 line 17 through page 233 line 2).
- 10. Kobe triplex pumps operate at high pressures and if there is any kind of leak there is a big mess. (Tr. Vol. I page 187 lines 6 through 24).
- 11. The sump in the Kobe triplex pump would overflow. (Tr. Vol I, page 233 lines 3-16).
- 12. The New Mexico Oil Conservation Division (hereinafter referred to as "NMOCD") file contained numerous reports prepared by field personnel in Lea County of leaks on the Priest lease, particularly at the Kobe triplex pump, and the

- sump during the period when Polaris was the operator. (Plaintiff's Exhibits 37, 39, 40, 41 and 42).
- 13. These reports included observations of the Kobe triplex pump leaking, the sump being full and oil being released from the pump area inside and outside the battery fence. (Plaintiff's Exhibits 37, 39, 40, 41 and 42).
- 14. The area around the Kobe triplex pump at the Priest lease battery was mucky with oil. (Tr. Vol. I, page 185 lines 12 through 22).
- 15. There was a pit at the east end of the Priest lease battery. (Tr. Vol I, page 112 lines 3 through 7).
- 16. The spill from the Priest lease battery in the area of the Kobe triplex pump would extend twenty or thirty feet on the ground outside the battery fence. (Tr. Vol. I, page 127 lines 8 through 12).
- 17. These spills were observed over a period of several months in 1996 and created the mucky area described in 1999 and 2000. (Plaintiff's Exhibits 37, 39, 40, 41 and 42; and Tr. Vol. I page 185 lines 12 through 22).).
- 18. The NMOCD has promulgated its Guidelines for Remediation of Leaks, Spills and Releases (hereinafter referred to as "Guidelines"). (Plaintiff's Exhibit 57).
- 19. The Guidelines state that the NMOCD requires corrective actions be taken for leaks, spills, and releases which have a reasonable probability to injure or be detrimental to fresh waters, and the Guidelines provide direction for remediation of soils and fresh waters contaminated by leaks, spills or releases. (Plaintiff's Exhibit 57 page 1).

- 20. Polaris did not attempt to clean up the spills properly and instead would cover the spills with sand or caliche. (Tr. Vol I, page 132 lines 14 through 23; and Tr. Vol. II, page 393 lines 2 through 8).
- 21. Covering the spills with sand or caliche was contrary to NMOCD required procedures for dealing with oil spills. (Tr. Vol I, page 132 line 24 through page 133 line 5; and Tr. Vol. II., page 383 lines 2 through 8).
- 22. Putting caliche on oil spills accelerates the migration of hydrocarbons to ground water. (Tr. Vol. II, page 385 line 5 through page 386 line 1).
- 23. The NMOCD field representative observed that Polaris did a bad job of operating the Priest lease, and when he met Davis Payne, of Polaris, at the Priest lease battery it looked pitiful. (Tr. Vol I, page 146 lines 5 through 10).
- 24. Polaris admitted to Angell that the Priest lease was in bad shape. (Tr. Vol. I, page 47 lines 18 through page 48 line 4).
- 25. When the NMOCD field representative met with Davis Payne of Polaris in 1996, at the Priest lease battery, there was oil running all over the place, the circulating pump was standing in oil and the Kobe triplex pump had oil all the way around it with oil running outside the fence. (Tr. Vol I, page 146 line 22 through page 147 line 2).
- When the NMOCD field representative pointed out the problems to Davis Payne,Mr. Payne indicated he did not see a problem. (Tr. Vol. I, page 148 lines 12 through 21).
- 27. NMOCD personnel observed free standing oil around the Priest lease battery.

- (Tr. Vol. II, page 380 lines 8 through 24).
- 28. The failure of Polaris to report the free standing oil around the Priest lease battery violated NMOCD rules. (Tr. Vol. II, page 381 lines 1 through 7).
- 29. Polaris believed it should not have to clean up its spills because of the revenues and taxes it generated for the State of New Mexico. (Tr. Vol. I, page 149 lines 1 through 5; Tr. Vol. II, page 347 line 13 through page 348 lines 15; and Plaintiff's Exhibit 54).
- 30. The NMOCD field representative identified the Priest lease spills as creating health and environmental problems and put Polaris on notice of this. (Tr. Vol. I, page 150 lines 2 through 11).
- 31. The leaks on the Priest lease were not cleaned up properly. (Tr. Vol I, page 159 line 24 through page 160 line 7).
- 32. The current environment bureau chief of the NMOCD noted that in late 1996 Polaris had never filed a spill report and when he examined the Priest lease oil spills had been covered with caliche. (Plaintiff's Exhibit 48; Tr. Vol. II, page 390 lines 12 through 19; and Tr. Vol. II, page 383 lines 2 through 8).
- 33. There is hardpan and a large oil stain on the east side of the Priest lease battery.

 (Tr. Vol. I, page 46 line 21 through 47 line 8).
- 34. Davis Payne is the current secretary-treasurer of Polaris and is the former president of the company. (Tr. Vol. I, page 218 lines 2 through 5).
- 35. Gary Payne is the current president of Polaris. (Tr. Vol. I, page 218 lines 6 and

7).

- 36. Davis Payne is a petroleum engineer. (Tr. Vol. I, page 227 lines 6 through 8).
- 37. Davis Payne of Polaris admitted that if hardpan exists on the east side of the Priest lease battery that condition occurred since Polaris took over operation of the lease. (Tr. Vol I, page 235 lines 15 through 18).
- 38. The area east of the Priest lease battery contained grossly stained soils and has highly contaminated saturated soils as same are defined by the NMOCD. (Plaintiff's Exhibit 57 page 4; Tr. Vol. I, page 46 line 21 through page 47 line 8).
- 39. Polaris admits that there exist unsaturated contaminated soils, defined as unstained soils which contained benzene, toulene, ethylbenzene and xylene, but refused to admit there are highly contaminated saturated soils. (Tr. Vol. II, page 437 line 22 through page 438 line 13).
- 40. Unless there were free phase liquids Polaris did not consider there to be gross staining and highly contaminated saturated soils, which is contrary to the definition set forth in the NMOCD spill Guidelines. (Tr. Vol. II, page 306 line 8 through page 307 line 6).
- 41. Polaris never determined the vertical extent of the contamination created by the spill. (Tr. Vol. II, page 434 page 19 through page 435 line 9).
- 42. Davis Payne is familiar with geology and soil dynamics. (Tr. Vol. I, lines 9 through 16).
- 43. Polaris, through Davis Payne, testified that oil does not go more than three feet below the surface. (Tr. Vol. I, page 235 lines 3 through 10).

- 44. Davis Payne also testified that no spill on the Priest lease went down more than 18 inches. (Tr. Vol. II, page 303 lines 20 through 24).
- 45. Davis Payne knew that in the area of the Priest lease in Lea County, the soil is less than three inches deep with caliche underlying the top soil and that caliche has a lot of permeability. (Tr. Vol. I, page 234 lines 1 through 19).
- 46. Davis Payne testified that Polaris did not address oil in the subsurface because the oil remained on the surface and did not migrate into the subsurface. (Tr. Vol. I, page 245 lines 13 through 16).
- 47. Numerous times from 1996-1998 Polaris hired contractors to cover up spills and clean up oil spill contamination or "messes" as described on the various invoices to Polaris. (Plaintiff's Exhibits 65, 66, 67, 68, 69 and 70).
- 48. The testimony of Polaris that hydrocarbons stay only on the surface and migrate no more than three feet below the surface is refuted by the present NMOCD environmental bureau chief. (Tr. Vol. II, page 376 line 16 through page 377 line 5).
- 49. Polaris admits that the NMOCD requires the operator to determine whether the vertical extent of the contamination went down to groundwater or not. (Tr. Vol. II, page 435 Lines 6 through 16).
- 50. Polaris admits that it did not do what was required by the NMOCD spill Guidelines. (Tr. Vol. II, page 455 lines 16 through 18).
- 51. Polaris did no site assessment nor did it make risk determination as required by

- the NMOCD spill Guidelines. (Tr. Vol. II, page 457 line 13 through page 458 line 1).
- 52. To clean up spills Polaris put cotton gin trash over the top of the spill. (Tr. Vol. I, page 244 line 17 through page 245 line 10).
- 53. Davis Payne admitted that the NMOCD spill Guidelines did not authorize Polaris to put cotton production waste on top of oil spills. (Tr. Vol. II, page 297 lines 14 through 22).
- 54. The failure to properly handle the oil standing around the Priest lease battery threatened to contaminate groundwater. (Tr. Vol. II, page 381 lines 7 through 9).
- 55. The present NMOCD Environment Bureau Chief and the NMOCD senior hydrologist from Santa Fe thought the contamination at the Priest lease battery would pose a future threat to groundwater because of the amount of oil on the ground and the fact it was not being attended to by Polaris. (Tr. Vol. II, page 382 lines 12 through 23).
- 56. Angell asked Polaris to drill a monitor well and investigate whether the standing oil had impacted groundwater. (Tr. Vol. I, page 48 line 23 through page 49 line 3).
- 57. Angell knew that groundwater in the area of the Priest lease is shallow, from 40-60 feet, and it is overlaid by caliche fractures. (Tr. Vol. I, page 48 line 5 through page 49 line 6).
- 58. When Polaris failed to investigate the location where the standing oil was present

- in and around the Priest lease battery, Angell got an environmental company to go drill monitor wells. (Tr. Vol. I, page 49 lines 7 through 24).
- 59. Monitor well number 1 was drilled near the fence where the triplex Kobe pump was located where Angell had observed standing oil from 1992 to 2001. (Tr. Vol. 1, page 49 line 22 through 50 line 6).
- 60. The well was located down gradient and was drilled within five feet of the triplex pump sump or pit. (Tr. Vol. I, page 50 lines 13 through 18).
- 61. The area where the monitor wells were located fall within the NMOCD definition of highly contaminated soils. (Tr. Vol. II, page 324 lines 1 through 20).
- 62. The NMOCD Guidelines provides that monitor wells should be installed adjacent to and down gradient from the area of the leak. (Plaintiff's Exhibit 57 page 10).
- 63. Angell observed the drilling of monitor well number 1 and observed contamination to five to seven feet and smelled hydrocarbons in the bore samples all the way down to the water table. (Tr. Vol. I, page 56 line 20 through page 57 line 3).
- 64. Angell observed hydrocarbons at the top of the water table. (Tr. Vol. I, page 57 lines 4 through 6).
- 65. The liquid from the monitor well was brownish and smelled like crude oil. (Tr. Vol. I, page 57 lines 13 through 19).
- 66. The week prior to trial, Angell had another sample pulled from the monitor well and it was consistent with the liquid obtained at the time of the original testing.

 (Tr. Vol. I, page 61 line 12 through page 63 line 3).

- 67. The presence of contamination on the groundwater was confirmed by Cliff Brunson, Shell's environmental expert. (Tr. Vol. II, page 322 lines 16 through 21).
- 68. Cliff Brunson (hereinafter referred to as "Brunson") confirmed the water was contaminated with benzene, trimethylbenzene and xylene, which would be associated with groundwater contamination from oil field operations. (Tr. Vol. II, page 323 lines 14 through 18).
- 69. Brunson acknowledged that the water samples collected had an odor of crude oil.

 (Tr. Vol. II, page 324 line 21 through page 325 line 1).
- 70. Brunson stated, based on his experience, slow leaks extending over an extended period of time are the most insidious for groundwater contamination. (Tr. Vol. II, page 325 lines 13 through 17).
- 71. Brunson noted that when a spill occurs it is important to determine the vertical extent of the spill so to develop a remediation plan, so that the spill does not impact groundwater. (Tr. Vol. II, page 328 lines 8 through 17).
- 72. Brunson also noted that, in Lea County oil spills, oil seeps more than three feet below the surface. (Tr. Vol. II, page 317 lines 3 through 6).
- 73. Benzene, xylene and trimethybenzene are substances which are detrimental to public health, fresh waters and animal and plant life. (Tr. Vol. II, page 360 lines 8 through 20).

- 74. The liquid which was pulled out of the monitor well would be fatal to livestock, it would also cause liver and kidney damage. (Tr. Vol. I, page 63 lines 4 through 15).
- 75. The other known areas of contamination on Angell's ranch were located over three quarters of a mile away to the south and west, and the area impacted by these other spills has been fully delineated, and had showed signs of receding.

 (Tr. Vol. I, page 66 line 18 through page 67 line 16).
- 76. These other areas of contamination were down gradient from the Priest lease as the general flow in the Ogalalla is to the south-southeast. (Tr. Vol. II, lines 11 through 13).
- 77. Even though Polaris was advised by NMOCD personnel of oil spills on the Priest lease and its battery they never properly addressed such problems and they never sent to NMOCD work plans of how these oil spills were going to be cleaned up. (Tr. Vol. I, page 157 lines 5 through 17).
- 78. United Operating Company succeeded Polaris as operator of the Priest lease in October of 2000. (Tr. Vol. I, page 177 lines 2 through 5).
- 79. When United took over operations of the Priest lease battery they observed old tanks, old equipment and oil-saturated dirt which was very dark and appeared saturated with oil with some standing oil. (Tr. Vol. I, page 181 lines 11 through 17).

- 80. When United took over operations the Priest lease battery was a mess. (Tr. Vol. I, page 191 lines 5 through 13).
- 81. When United accessed the property prior to assuming operations it underestimated the condition of the equipment which was more corroded than first thought. (Tr. Vol. I, pag 192 lines 9 through 19).
- 82. United removed the Kobe triplex pump almost immediately after it assumed operations which eliminated the leaking from the Kobe triplex pump which had existed for years. (Tr. Vol. I, page 194 lines 20 through 23).
- 83. When United took over operations it spent \$100,000.00 repairing leaks on the Priest lease. (Tr. Vol. I, page 205 lines 7 through 17).
- 84. United replaced the pumper who had worked for Polaris operating the Priest lease because he was indifferent to leaks. (Tr. Vol. 1, page 206 line 9 through page 207 line 9).

CONCLUSIONS OF LAW

- Polaris has knowingly and unlawfully introduced hydrocarbons into the Ogalalla
 Aquifer underlying the Priest lease in Lea County, New Mexico.
- 2. The substances introduced into the groundwater by Polaris are offensive and dangerous for human or animal consumption or use.
- The Ogalalla Aquifer is a declared or known groundwater in Lea County, New Mexico.
- 4. Polaris has polluted water and created a public nuisance as same is defined by Section 30-8-2 NMSA 1978.

- 5. Angell is a proper party to bring suit against Polaris to abate the public nuisance.
- 6. Polaris is hereby ordered to abate the public nuisance and this Court retains jurisdiction to enforce such abatement.
- 7. Angell is entitled to recover attorney fees. The Court will retain jurisdiction to determine reasonable attorney fees.

Respectfully Submitted,

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By:

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CERTIFICATE OF MAILING

I hereby certify that a true and correct copy of the foregoing was forwarded via facsimile to the following counsel of record this ____ day of July, 2006:

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